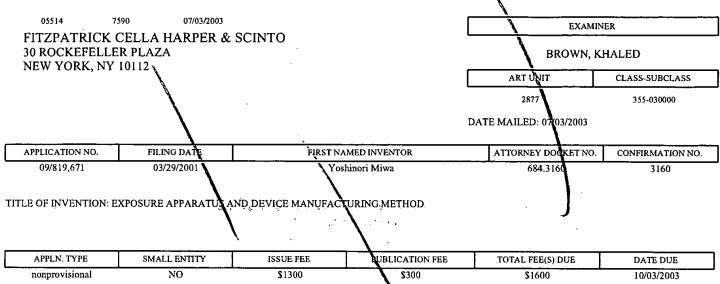




United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Yuginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE



THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents

Alexandria, Virginia 22313-1450 (703)746-4000

re as or

appropriate. All further con indicated unless corrected by	respondence including the below or directed otherwis	Patent, advance orde	rs and notification	of maintenance fe	required). Blocks I through 4 s les will be mailed to the current ress; and/or (b) indicating a sepa	correspondence address a
05514 75	E ADDRESS (Note: Legibly mark- 590 07/03/2003		e Block 1)	Fee(s) Transmi	te of mailing can only be used for ttal. This certificate cannot papers. Each additional paper, s	be used for any other
FITZPATRICK (30 ROCKEFELLE NEW YORK, NY		c SCINTO		I hereby certify United States Po envelope address	must have its own certificate of n Certificate of Mailing or Trans that this Fee(s) Transmittal is stal Service with sufficient posta sed to the Box Issue Fee address e USPTO, on the date indicated b	nailing or transmission. smission being deposited with the ge for first class mail in an above, or being facsimile
						(Depositor's name
			•			(Signature
						(Date
APPLICATION NO.	FILING DATE	FII	RST NAMED INVEN	ΓOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,671	03/29/2001		Yoshinori Miwa	•	684.3160	3160
APPLN. TYPE	SMALL ENTITY NO	ISSUE FEE	PUBL	CATION FEE	TOTAL FEE(S) DUE	DATE DUE 10/03/2003
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BROWN, K	HALED	2877	355-03000	0		
CFR 1.363).	ce address or indication of	`	the names of u	on the patent from to 3 registered p alternatively, (2)	patent attorneys	
Address form PTO/SB/13	ence address (or Change of 22) attached.	Correspondence	single firm (ha	ving as a membe	er a registered	
☐ "Fee Address" indicati PTO/SB/47; Rev 03-02 o Number is required.	on (or "Fee Address" Indica or more recent) attached. U	ation form se of a Customer	registered paten	ent) and the name t attorneys or agent e will be printed.		
3. ASSIGNEE NAME AND	RESIDENCE DATA TO	BE PRINTED ON TH	E PATENT (print o	r type)		
PLEASE NOTE: Unless a been previously submitted (A) NAME OF ASSIGNE	to the USPIO or is being s	ubmitted under separa	will appear on the partie cover. Completic ESIDENCE: (CITY	n of this form is N	f assignee data is only appropriat OT a substitute for filing an assig COUNTRY)	e when an assignment has nment.
Please check the appropriate	assignee category or categ	ories (will not be print	ed on the patent)	☐ individual	Corporation or other private gr	roup entity 🚨 governmen
4a. The following fee(s) are	enclosed:	4b. Pa	ayment of Fee(s):			
☐ Issue Fee			check in the amount			
☐ Publication Fee			yment by credit care			
☐ Advance Order - # of C	opies	☐ The Depo	e Commissioner is l sit Account Numbe	nereby authorized b	by charge the required fee(s), or c (enclose an extra copy of this i	redit any overpayment, to form).
Commissioner for Patents is	requested to apply the Issu	e Fee and Publication	Fee (if any) or to re	apply any previou	usly paid issue fee to the applicati	on identified above.
(Authorized Signature)		(Date)			- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	
NOTE; The Issue Fee and other than the applicant; interest as shown by the re-	a registered attorney or as	gent; or the assignee	or other party in			
This collection of informa obtain or retain a benefit application. Confidentiality estimated to take 12 minut completed application for case. Any comments on suggestions for reducing t Patent and Trademark (22313-1450. DO NOT S SEND TO: Commissioner	by the public which is to vis governed by 35 U.S.C. les to complete, including a m to the USPTO. Time w the amount of time you his burden, should be sent Office, U.S. Department END FEES OR COMPLI	file (and by the USP1 122 and 37 CFR 1.14, 23thering, preparing, a ill vary depending up require to complete to the Chief Informal of Commerce, Alex ETED FORMS TO 1	ion is required to TO to process) an This collection is and submitting the on the individual this form and/or tion Officer, U.S. kandria, Virginia THIS ADDRESS.			

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/819,671	03/29/2001	Yoshinori Miwa 684.3160 31		3160	
05514	7590 07/03/2003		EXAMINER		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA			BROWN, KHALED		
NEW YORK, N	• '		ART UNIT	PAPER NUMBER	
			2877		
			DATE MAILED: 07/03/2003		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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NEW YORK,		LA		ART UNIT	PAPER NUMBER	
UNITED STAT	ΓES			2877	·	
				DATE MAILED: 07/03/2003		

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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Application No. Applicant(s) MIWA ET AL. 09/819,671 Notice of Allowability Art Unit Examiner Khaled Brown 2877 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to *communication filed 5-15-03*. 2. The allowed claim(s) is/are 1-21,23,24,26,44-66 and 69-72. 3. The drawings filed on 29 March 2001 are accepted by the Examiner. 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🔯 All b) Some* c) None of the: 1. \(\subseteq \text{ Certified copies of the priority documents have been received.} \) 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). (a) The translation of the foreign language provisional application has been received. 6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No. (b) including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner. (c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. ___ Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1 Notice of References Cited (PTO-892) 2 Notice of Informal Patent Application (PTO-152) 3 Notice of Draftperson's Patent Drawing Review (PTO-948) 4 Interview Summary (PTO-413), Paper No.____. 5 Information Disclosure Statements (PTO-1449), Paper No. 6☐ Examiner's Amendment/Comment 7 Examiner's Comment Regarding Requirement for Deposit 8⊠ Examiner's Statement of Reasons for Allowance of Biological Material 9☐ Other

Application/Control Number: 09/819,671

Art Unit: 2877

DETAILED ACTION

Allowable Subject Matter

Claims 1-21, 23,24,26,44-66 and 69-72 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record fails to disclose or suggest a switching means for selectively using plural purifiers disposed in the gas circulation path, an optical integrator, two refraction members, or preparing a maintenance database all in conjunction with the rest of the claimed subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Note: No IDS was filed with Applicants Amendment filed 5-15-03.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 703-306-5738. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

KB June 19, 2003

Frank Font Supervisory Patent Examiner Art Unit 2877

Frank & Fort